Please amend claims 1-3, 5 and 8, and add a new claim 9 as follows:

1.   (Currently Amended) A method for displaying results of a hybridization experiment in which a plurality of probe biopolymers immobilized on a biochip are hybridized to a sample biopolymer, the method comprising the steps of:

determining information obtained in the hybridization experiment about a hybridization level for each of the probe biopolymers;

determining a probe homologous similarity score, which represents representing a homologous similarity between first probe data on a base sequence of at least one of the probe biopolymers and second probe data on a base sequence of at least one other of the probe biopolymers, according to an algorithm for calculating degrees of homology between two biopolymer sequences; and

displaying said information about the hybridization level for each of the probe biopolymers together with said probe homologous similarity score, including generating a visually-intuitive visual graphical representation of the determined hybridization level and correspondingly determined probe homologous similarity score so as to provide at least one of a visual confirmation of similarities between the base sequences of corresponding biopolymers used in the hybridization experiment and a visual indication of unexpected or improper hybridization.

2.   (Currently Amended) The method for displaying results of a hybridization experiment according to claim 1, wherein said step of generating the visually-intuitive visual graphical representation includes assigning different depths in a color to different values of the probe homologous similarity score.

3.   (Currently Amended) The method for displaying results of a hybridization experiment according to claim 1, wherein said step of generating the visually-intuitive visual graphical representation includes assigning different depths in a color to different values of the probe homologous similarity score, and arranging subject probe biopolymers horizontally and vertically to form a matrix.

4.   (Previously Presented)   The method for displaying results of a hybridization experiment according to any one of claims 1 to 3, wherein said step of generating the ~~visually intuitive~~ visual graphical representation includes displaying the information about the hybridization level by assigning different depths in a color to different values of the hybridization level, or by providing spot images of respective probe biopolymers.

5.   (Currently Amended) The method for displaying results of a hybridization experiment according to any one of claims 1 to 3, wherein probe biopolymer data, hybridization levels and probe homologous similarity scores are displayed side by side by sorting them by values of the probe homologous similarity score between specific one of the probe biopolymers and each of the probe biopolymers.

6.   (Original) The method for displaying results of a hybridization experiment according to claim 5, wherein the hybridization levels obtained from a plurality of biochips are displayed side by side.

7.   (Original) The method for displaying results of a hybridization experiment according to claim 6, wherein a profile of changes in the hybridization level of the subject biopolymers on said plurality of biochips is statistically analyzed, and the results of the analysis are displayed together with the results of clustering the probe biopolymers side by side.

8.   (Currently Amended) The method for displaying results of a hybridization experiment according to claim 1, wherein the probe data on the base sequences of the probe biopolymers for determining the probe homologous similarity score includes at least one of DNA probe names, DNA probe definition information and DNA probe sequences.

9.   (New) The method for displaying results of a hybridization experiment according to claim 1, wherein said algorithm is a Smith-Waterman method or a BLAST method.

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